

U. S. Department of Agriculture.

FIELD DIARY

North Dakota June 14 - July 1.

Oregon ^{OP} July 1 - Aug 31.

Calif. Aug 31 *Vernon Bailey*

Mr. Vernon Bailey

Washington D.C.

(Official title.)

1916

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D. F. Houston
Secretary of Agriculture.

8-2887

1916

June 10, Left Washington D.C.
at 6:15 P.M. on Penn. Road. for
Chicago, Fargo. & Oregon.

June 11. Arrived at Pittsburgh
before daylight and at Chicago
2 P.M. Sunday -
Left Chicago 6:30 P.M. -

C. M. & St. P.

June 12, Arrived at St. Paul
7:05 A.M. and Elk River
10 A.M. Went out to
my old home at Meadow
Lake, on leave.

June 13 - Left Elk River
at 10 A.M. and reached
Fargo at 5:45 P.M.
Arranged with Prof. Bell for
collecting permits for myself &
Obubobs.

June 14, Left Fargo 5:30 AM. on G.N. Ry. and arrived at Devil's Lake 11 AM. In PM went over to Biologized Lab.

June 15. Went out to Sweet water Lakes on east side where water birds breed in great numbers.

June 16 - Went over to the Agency at old Ft. Totten and walked the whole length of the Sulky Hill Park fence. Had to stay over night at Agency and finish examination — wrong.

Found the fence will drag, will be done by July 1.

About one mile done, posts set set & wire strong.

A crew is still working at it.

June 17. Took a shovel out
and dug under concrete at
base of posts. Found it too
shallow in line posts and one
corn post. One gate post
seemed all right.

Came back to Devil's Lake
with Mr. Zebcon. Wrote report.

June 18 Sunday. Went over
to Bird Island in Devil's Lake.
Found about 25 or 30 ~~nesting~~
nests with eggs and young.
Lots of Microtus on island, a few
Thomomys, and a lot of
holes that may be made by
rats. Some trapping should
be done on the island after
the breeding season.

June 19. Left Devils Lake
10:30 A.M. Went to Ladd's
and south to Janstown
Lakes & sloughs full of water.

At Minnewauken the lake has
all receded beyond the point of
Graham Island & only a marsh
remains. There is much
timber along the west end of
the lake which now reaches.
Great abundance of Eleagnus
west of lake.

At Sheyenne the road
crosses the Sheyenne River,
a small marshy stream but
with wide banks that indicate
a considerably river when the
Mouse ran out this way.

At Carrington Hawkesnest ^{11th}
looks up to the west and a
long line of similar ridge extends
south east from it nearly
to Janstown, as the eastern

edge of the Grand Chouteau.
There are timbered gulches
along its sides that can be
seen from the train south of
Edmunds.

Waited at Jamestown till
nearly 8 PM. for train to Bismarck
and arrived there at 11:45 PM.
The Grand Chouteau bears
less marked along its eastern
edge but is distinguishable
west of Jamestown.

A considerable fringe of trees,
boxelder, ash, elm & ~~birch~~
follows both the Dakota River &
the Pipestone well north of
Jamestown.

Friday 20 - Des Moines,
Went up to capitol and
got acquainted with Dr. M.
R. Gilmore in charge of the
museum and ethnological
collection there and with Miss
G. B. Carpenter the librarian
of the state Historical Soc.

Scoured through the collections
for any trace of bear bones
but found nothing.

Then went through local publications
for bear buffalos & elk notes.
Got some from The Record &
some from Annual reports
of Historical Soc. Will get more
from both.

Met the Secretary of Chamber
of Commerce & talked boy scouts
to him.

June 21 - Went to Library in
preparation & dug out old bear
ed buffalo notes

Took train to Mandan at
1 PM & then train to
Cannon Ball and stopped
at store of Mr. Underhill.

June 22 - Set traps over on flats near
Cannon Ball River for the "bear
house" listed plants & birds.

June 23 + 24, Trapping and tramping
over country, talking with Indians
and with whites as far as they
know about the mammals.
Visited Dr. Bude and got much
information from him.

June 25 Sunday, Took up traps &
got more mice, but none of the
people know which stores the beans.

~~June 24, Left Can - ball~~
at 4:20 P.M. for Mott
arrived 8:30 P.M.

Followed up the Canadian
& Parkins, then up Todd Co.
and over open prairie to
where we struck the North
Fork of Canadian. Here a few
trees fringe the river valley,
and the boulders & willows extend
up as far as Mott, and
probably a little beyond.
There are grassy buttes & the
west end all along on the
crest of divides but the
whole country is prairie and
pretty level generally.

Good farms and towns are
rapidly developing & crops
are looking well.

Dec 27 Left Wauk 12:45 for
Shields and drove for three
to Parker. Found more timber of
mainly ash & boxelder along the
rivers to New Leipzig, but left
the river there & went over prairie
to where we struck the main
Cannonball at Shields. Here
the timber of Cottonwood, elm
boxelder, ash & oak is quite
extensive. Came back over
prairie from Shields to Parker,
20 miles, but at Parker or
on the river bottoms with timber
& badlands all around.
Tramped over hills east of town
in evening and saw chipmunks
& heard coyote & saw a plover
& heard a poorwill.

June 28 set traps & caught Chipmunks & saw Coyotes & got good notes around Parkin.

June 29. Took train to Mandan & thence to Southern world on repeats rest of day.

June 30 Took morning train for Deerlodge Butte.

Got auto & went out to Bullion Butte and hunted over it for pipits but did not find any. A pair of duck hawks are nesting on the north side of butte. Saw Sharp tailed grouse & young.

July 1. Left Siletz Butte
4 P.M. for Missoula.

July 2. Arrived Missoula 7 P.M.
and went out to Coeur d'Alene
in evening on auto bus.
On leave to July 6.

July 6. Returned to Missoula
and took evening train west,

July 7. Reached Walla Walla
2 P.M., & found I could not
get over the Mt. & Lookout ~~without~~
an expensive auto trip, so decided
to go around by Laramie.
Went over some of the valley
about Walla Walla and got as
much on life zones as possible.

July 8. Had to wait till 2:50 P.M. for train to Pueblo to connect with eastbound train. Arrived at La Grange 8 P.M.

July 9. Took 7 A.M. train to Palmer, arriving 9 A.M. Could not get a horse or team so walked up Lookoutless Creek to near its head to my lookout. Built about 12 miles, then back 4 miles to the Range Station & staid all night. Got zone books and mapped Canadian and Kavibon areas west of Grand River River and corrected zone lines along both sides of valley.

Found a wide Canadian crop on the Wts. west of Grande River River, with good stand of Pines monticola & great areas of valuable timber.

July 10 After a hot day of the season this was part at the Ranger Station at about 4500 feet, in edge of Canadian zone. Settlers are claiming for land on this plateau but it is in Canadian zone with heavy stand of Lodgepole pine and worthless for farming.

Started back at 6 AM & walked 8 miles down to station, but train did not go till 11 AM.

Went to Joseph and walked up on big moraine east of Wallowa Lake & checked up boundaries of zone map, got lists of plant, bird etc. Arranged for auto traps & Immuno early in morning. A hot day.

Crops in Wallowa Valley mostly grain, some potatoes, no corn. Good alfalfa. Heavy rich soil. All volcanic except one mountain rd.

May 11 got into & went 35 miles N.E. over big open plateau up to + 4500 feet, then down Camp Creek to Sheep Creek & down it to the Juniper at 2200 feet where a small, open valley is wide enough to get the sunshines and is very hot. The basin is mainly Upper Sonoran, but transition zone species come down along the cold streams & in gulches on cold slopes. Corn & fruit and alfalfa patches are common. Peaches & black cherries grow here & apples. Catalpa trees are large and very full of flowers. Service berries are ripe & big & juicy, Thornapple, Elderberry, Chokeberry, gooseberry, currant bushes are all full of fruit. Syringa is full of blossoms half way up Camp Creek, but no blossoms below & no bushes at head of creek.

July 12 - Arrived by caravans
3 A.M. & went to Parker Hotel
Got mail & wrote letters & reports
& wired office & to Sheldon.

July 13 - Took train to Riverside
at 12:20 and arrived 6 P.M.
Found Sheldon there at Du Pre
Hotel. & staid over night.

July 14. Got a team & took us over
to ranch of Mr. Harry Fairbanks
2 miles north west of town where
we are well located for collecting.
Set traps in P.M.

July 15 - Made a good catch
& worked on specimens,
& set more traps.

July 16-20, Collecting at Ranch

July 21. Left Riveside 9 A.M.
and reached Crane at end
of railroad at noon.

Found Robert H. Becker there
a day ahead of me and located
in one of the tents of a new
town. Hunted & set traps -
1 P.M. killed 7 Brachylegus.

July 22 - 27 - Still at Crane
collecting & nursing Becker
through a fever.

Crane is in the gap where the
water once flowed out of the old
John Day Lake Basin and
probably 40 feet higher than
the present surface of Malheur
Lake. From here to Burns &
west & south is a great
level sagebrush plain.

Hot days & cold nights.
Dusty & dry.

July 28, took Auto over to Diamond col located with Sheldon & Bader at Mr. Whartons ranch

July 29 - camped over the meadows - valley for getting an idea of what is here. Wrote reports.

July 30 - Sheldon & I started up the Steens Mts. with packs on our backs and hiked about 18 miles to Smiths cattle camp at 6400 feet in the head of Coconango Cr., Then over the ridge at 6800 feet col down into Riger Canyon to an old cabin at 6000 ft where we staid all night & slept on a bunch of willow boughs without blankets on a bunk and kept a fire in the stove to keep warm.

The canyon is deep and narrow but U shaped with a good flat bottom partly timbered with aspen. A fine tree full of trout, good grass & lots of cattle

July 11 Started early and proceeded
up to head of canyon, about 6 miles
found 2 other vacant cabins at 6500
and 7000 feet, the last close to the
great glacial cirque at the head
where big snowbanks pound down
many pinnacles of the stream.
The whole gorge is glacial and 2000
to 3000 feet deep, with beautiful
aspen grove bottom. A fine stream
is full of trout. Mule deer are
common.

Chipped out of gorge at head
to main crest of range at 8500
feet, then 6 miles south along
crest to highest peak at 9400
feet. Then back along crest
to head of McCoy Creek &
struck sheep camp in head
of Gulch in first aspens
& staid all night - at

Aug. 1 - followed down M-Wy
Creek about 5 miles, then out on
ridges and across to Coconino
at the Seward Cabin & back
down the road to Diamond.
Came about 25 miles.

Aug. 2 Wrote notes & rested my
legs at the ranch.

Aug. 3 - Took stage to Voltage
and Narrows, and staid
there over night

Aug. 4 - Went down to Harry
Lake & back. Caught
gophers.

Aug. 5 - Came up to Burns
and stopped at Burns Hotel.
Saw Dr. E. L. Hubbard and talked
of local species

Aug. 14. Summary,
Went out & got *Citellus sonorus*
and made up skins.

Aug. 7. Packed specimens and wrote
notes.

Aug. 8. - Finished reports & got
a lot of notes from Capt. Louis,
the chief of this band of Pintos.

Aug. 9. - Started for Bevel at
7 AM & arrived at 5 PM,
150 miles by Auto truck over
fair roads & pretty level
 sagebrush country.

Land west of the country to be
in transition zone as the
prairie is all accidensalis
& Actinisa subrosea predominates
& the Sonoran species are rare
or entirely absent until a tree
is struck near Bevel.

Aug. 10. 1897 Read at 11:45
A M. ad came down the east
side of the Des Chutes River,
dropping into the canyon along
Willow Creek below Haupiales
& then following the river to its mouth
down to the Dalles.
Went out to Warm Springs
Indian camp & got names
of animals & notes on shop.
Then crossed over to Grand
Dalles & caught 4:41 PM
train & reached Portland
7:45. Went to Hotel Oregon
where Dr. Messier & I stopped
in 1895 after a pack trip through
the Cascades.

~~Aug. 11~~ Mr. Finley was at home and so we know where he is but has a lecture here in a couple of days so will wait for him.

Aug. 12 1913, Waiting for Finley.

Aug. 14. Finley returned to Pearson came to me. Evening we went to Audubon meeting. After meeting took train to Roseburg

Aug. 15. Arrived Roseburg 9:30 AM and went to Kumpogue Hotel.

Aug 16, Tramped over hills and set gopher traps & listed plants & birds & mammals.

Waiting for Peck to return from Anchorage.

Aug. 19, drove out to Reaston,
18 miles west ad then climbed
to the crest of the Coast Range
ad over the other side.
Roseburg is 480, Preston is
800, I top of ridge 2100.
The oaks reach as far as Reaston
ad the woodches & maples go halfway
up the range. The hemlocks ad
Rhododendrons come over the top of
the ridge ad down 100 feet on
the east slope. There seems to
be no pure Cascadian zone but
many Cascadian zone species occur
along the tops ad west slope of the
ridges. The forest is dense ad
heavy with huge trees of Douglas
spruce, hemlock and *Abies grandis*.
Salal, Red *Vaccinium*, large bushes
of Rhododendron, *Limnanthes*, *Vancouveria*
whipplea etc. are abundant on tops.

~~Pautheria~~ berries are ripe at 1000 feet and the flowers just opening on top. Blackberries are loaded with ripe fruit in the valley and at their upper limit, 1000 feet or just in blossom. The difference in elevations is great on the lower and upper slopes of the range, but the extremes are evidently not sufficient to produce fully differentiated zones.

Returned to Wilson Ranch at east foot of range.

Aug. 20 Rained & necessary to
find Pack waiting for me.
Looked over plants & tramped over
hills with Pack

Aug. 21. Took rising train for Glendale
& arrived at 1 P.M.

Started up mountain S W of town
and listed plants with altitude.
Found a few Canadian zone species
but transition greatly predominant
to the top even on cold slope of mountain.
This is the highest peak west of town
while the main Coast range is over
30 miles west. Onion Peak, about
5 miles east of the pass is 5200 feet
& may have some Canadian on its cold
slope but there is no Canadian zone
ridge running west as I look for it.
The south slope is mostly clumped
of 2 species of *Wagerita* & 2 *Ceanothus*
& 2 *Garryas* & *Castanopsis*.

Aug. 22. Left Glendale 7:30 AM.

A tree of Sonoran at Merlin
and at Grants Pass but no
pure or solid Sonoran.

It is above mainly in the small
steeps while the timber is mainly
Yellow pine, oaks & sycamores.
To Gold Hill it is the same, along
north side of river but all mixed,
not pure Sonoran. The cold slopes
south of river are all transition.

At Medford the large valley seems
to be almost pure Sonoran which runs
well up on hot slopes but not on cold
slopes. This continues to beyond
Ashland where the wide, open valley is
napped as pure Sonoran.

Stopped at Ashland
and arranged for traps
Klamath Falls.

~~Aug 23~~
Aug 23 - Left Ashland at
9 AM and arrived at Klamath
Falls 6 PM.

Lift the last traces of Sonoran
species at 3300 feet and then
Wood Transition forest over the
ridge ^{at 4700 feet} and down to the creek at
Pinehurst where there were strong
traces of Sonoran species again
at 3000 feet on south slopes.
Soon entered pure Transition woods
again of big yellow & sugar pines and
Douglas spruce *Abies grandis* &
Libocedrus & this continued to where
we crossed the Klamath River.
and there to the second crossing.
Here the open sagebrush country
began with *Kunzia*, *Ceanothus cuneatus*,
Asternia idahoensis & *arborescens* &
Chrysothamnus graveolens & *Tortifolia* & *leucophylla*.
There are no strong traces of Sonoran on
this side of the lakes to Klamath Falls.

Aug. 2-4 - Got a Ford & drove
up west of Upper Klamath Lake
to Rocky Point on Pelican Bay

After climbing the first grade we
were in transition zone timber all
the way, following the edge of Long
Valley & Aspen Lake, and then the
big marsh. Found aspens and
lodgepole pines along the lake & marsh
shores on flat ground where apparently
cold water lies under the surface.

Pelican Bay is not an attractive
resort. The woods are dense with
chaparral, the roads are dusty, the only
place where you can see out is on
the marsh or the lake shore.

They catch some big trout out in the
lake, but only very few and even days
not any. Back of the shore the
forest is being lumbered off rapidly
& logs stored in rafts to Klamath Falls.

Aug. 25 Started before daylight for Mt. Pitt. got saddle horses and rode up to Four Mile Lake and a mile beyond to the south, and left horses and went up on foot to above timberline on the north east side into the old crater at about 8200 feet. The top is 9760. Got all the game birds and a good collection. Got back at 6.30 to Rocky point.

Aug. 26 Returned to Klawath Falls in PM on the launch down the lake. & found Jewell at the Hotel Hall or rather he found us at the White Pelican & spent the evening with us

Aug. 27. Sunday.

got auto & went down near
Tule Lake to get plants &
Map species. Found the
great flat part of Klamath valley
without trace of Sonoran, but the sandy
dry, south slopes are all well mixed
with Sonoran species.

Potatoes & corn have all been killed
to the ground in bottomland but
are untouched by frost on the
warm slopes a little above the
bottoms.

Aug. 28 Got a launch from
Belford & went down the
river to where the railroad
blocks us from entering lower
Klamath Lake. Hopped over
this & got some species
& mapped zones

Aug. 29 Writing up notes

Aug. 30 Left Klamath
 Falls at 6 AM with auto
 for Crater Lake, arriving at
 11 AM. Ran zone lines
 and made to outside of crater
 and returned, starting back
 at 3 PM & arriving 7 PM.

<i>Pinus ponderosa</i>	- 3000 NE
" <i>murrayana</i>	5000 NE - 7000 SW
" <i>lambertiana</i>	4500 - 5000
" <i>monilifera</i>	5000 - 7000
" <i>albicaulis</i>	7000 - 8000
<i>Pseudotsuga</i>	- 5000
<i>Picea engelmanni</i>	5000 -
<i>Abies grandis</i>	4200 - 5000 NE
" <i>nobilis</i>	5000 - 7000
" <i>canadensis</i>	" - "
" <i>lasiocarpa</i>	6000 - 8000
<i>Tsuga mertensiana</i>	" - "
<i>Libocedrus deodara</i>	4200 - 5000
<i>Juniperus occidentalis</i>	" - 4500
<i>Populus tremuloides</i>	" 5000
" <i>trichocarpa</i>	" "
<i>Prunus melanocarpa</i>	" "
" <i>emarginata</i>	" "
<i>Ceanothus prostratus</i>	" "
" <i>velutinus</i>	" "
<i>Aextostophylloides manzanita</i>	" "
" <i>nevadensis</i>	" 6000
<i>Acer douglasii</i>	inside of lake rim
<i>Alnus</i>	" "
"	" "
<i>Sorbus</i>	" "
<i>Holodiscus</i>	" "
<i>Vaccinium erythrocarpum</i>	5000 - 7000 NE
" <i>ovatum</i>	" 6000
<i>Paeonia</i>	

Aug. 31 Left Klamath Falls
12 m. Found Sonoran zone on
all west slopes around west side
and lower end of Lower Klamath
Lake & Warner Lake in Calif.
and again after passing the town
into Battle Valley. This is a
very large desert valley, mainly
Sonoran. The dominant vegetation is
Chrysothamnus graveolens, with some
Tortuaria and *Athrolymus*, *Sarcobatus*,
Asturias tridentata, *Kunzia*, and on
sandy soil *Oryzopsis*. Around
the edges are junipers accidentally
and at the southern edge *Pinus ponderosa*
Doris and *Macdoel* are good trees,
and Mt. Hebron is a lumber town at
south edge of valley.

In here we enter yellow pine
forest & keep in it through Bull
& Horse valleys and foot of Shasta
Mountains and down the north fork of

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Shasta to Weed, but the SW
slope of Shasta Park & Gravenstein
and the eastern, northern &
western parts of Shasta Valley
seen to be all Sonoran. They
are open, yellow & hot & bare
and below all chaparral.

A big area of yellow pines & *Juniperus*
orientalis extends out over
middle part of Shasta Valley
as shown on ^{option} map in blue.
Have mapped the zones as far
as possible for the trains.

Washhill

Bearcat seen -

Canada lynx not here

Panther used to be here many years ago the Indians say.
One ate a man long ago near the Twin hills. a boy who went into those hills for his test about two years ago. The place where he was eaten is still well known to the Indians.

Red fox still here

Kit fox said to be here.

wolves a few -

Tatca-o-kute-macolle Sioux name
of Killdeer Country was the Indian
name for the whole region between
the Mo. & Powder Rivers Country
because so many deer were killed
there. Name not applied to the
Wets. which were called
Pa-ha-shi-si-yata (wts. facing each
other). Another part of the
wts. was killed Pa-ha-ska (whithill)
Name ~~Killed~~ killed was applied by
whites to the Wets.

Black bear were seen all along
the Mo. R. along the Custer Trail,
at Devil's Hole

Grizzly never in this area but
along Mo. R. above Bismarck and
at Devil's Hole and along Shoshone.

With ^{Rev.} Wellington Solt, at
Belcourt, N.D. for account of
black bear killed in turtle nets.
Half breed Indian.

Never heard of moose or caribou
still abundant all along since
30 years ago.

Mountain sheep are on the upper
Custer Trail & Cedar but not
seen.

Dr. Beebe says the old Indians
say that 3 big wolves would
bring down an old buffalo bull
and that they commonly
killed ~~them~~ - buffalo

Rigbow Neal, Garrison, N.D.
Once saw 5 wolves bring down
an old buffalo bull, Walshi
about it & mention Dr. Beebe.

Beebe says the bears store
up grass where there is no
more brush.

Horntoads on this west
edge will eat some or eat
some with rattlesnakes, etc.

~~Sanguinaria, 13 roots~~
used for dye, purple magenta
fueea leaves for fire drill, in bunches
bound with sisaline.

~~fueea roots for soap
washing the hair, used for
for perfume or oil~~

Equisetum arvense - sweet grass

Bromus angustifolius - used for medicine.

Ipanca used for smoke medicine.

Lepuay beans are eaten in canyon
of Arizona. Freeman has published
on them in station bulletin.

~~Pictures of plants & birds.
Hornworts, Mephitis, Fibres,
Case specifications to Dr. Gilmore
Directions for preparing specimens.)~~

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S-2557

Mr. M. G. Steele,

Falcata cowassa - "used by Indians."
"Used by Indians."
"Used by Indians."

Dr. A. M^o. G. Steele,
Cancer Ball, may know of
her records for Indians
"Used by Indians,"
"Used by Indians,"
"Used by Indians,"
"Used by Indians,"

"Used by Indians,"
"Used by Indians,"

"Used by Indians,"
"Used by Indians,"

Columbine seeds, crushed & used for
perfume by Indians. on hair.



